

### REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

#### **Status of Claims:**

No claims are currently being added.

Claims 256 and 257 are currently being canceled.

Claims 232, 242 and 258 are currently being amended.

This amendment and reply amends and cancels claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

Upon entry of this Amendment, claims 232-255 and 258-269 will be pending in the application.

No new matter has been added. The specification (e.g., p. 33, ll. 17-24) supports the amendment made to claim 232.

Because the foregoing amendments do not introduce new matter, entry thereof by the Examiner is respectfully requested. Also, as this is an after-final response, entry is respectfully requested as claim 232 is being amended to address a 35 U.S.C. § 112, second paragraph rejection, as well as to include the features of now-canceled claims 256 and 257. The amendment to claim 258 places that claim in independent form.

#### **Claim Rejections – Indefiniteness:**

Claims 232-269 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, since the claim “do[es] not state what structural configuration is required of the array in order for the array to meet the limitation of being ‘configured to be operatively

associated with the detector.’’ While Applicants disagree with this indefiniteness rejection, in order to expedite prosecution of this application, claim 232 has been amended to recite additional features that provide a structural configuration (e.g., optical connectivity) between the array of sensors and the detector.

Accordingly, the presently pending claims are fully compliant with 35 U.S.C. § 112, second paragraph.

**Claim Rejections – Prior Art:**

Claims 232-269 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lewis et al. (U.S. Patent No. 5,571,401) in view of Schultz (U.S. Patent No. 5,985,356). Applicants respectfully request reconsideration and withdrawal of the rejection, for at least the reasons given below.

Presently pending independent claim 232 recites, among other things, that the first region and the second region on the substrate are physically separated, and

wherein the first region is recessed below the surface of the substrate in a first well and the second region is recessed below the surface of the substrate in a second well, the first well physically separated from the second well.

The Office Action does not specifically address these features of claims 256 and 257 (now incorporated into independent claim 232) its rejection of claims 232-269, whereby such “physically separate” and “recessed” features are not believed to be taught or suggested by Lewis et al. and by Schultz.

Still further, in its rejection of claim 232, the Office Action asserts that Lewis et al. teaches a detector operatively associated with a sensor array, but the Office Action does not provide a specific recitation as to where such a teaching exists in Lewis et al. Namely, while Lewis et al. describes a sensor array that comprises chemically sensitive resistors, with an electrical measuring device electrically connected to the sensor array, there does not appear to be a description in Lewis et al. as to the sensor array being optically connected with a detector.

Accordingly, presently pending independent claim 232 is patentable over the combined teachings of Lewis et al. and Schultz.

Presently pending independent claim 258 recites, among other things, that the first region and the second region on the substrate are physically separated, and wherein the first region is surrounded by ridges on the surface of the substrate and the second region is surrounded by ridges on the surface of the substrate, the first region physically separated from the second region.

The Office Action does not specifically address these features of claim 258 in its rejection of claims 232-269, whereby such features relating to “physical separation” and “ridges” are not believed to be taught or suggested by Lewis et al. and by Schultz.

Still further, in its rejection of claim 232, whereby such features are now incorporated into presently pending independent claim 258, the Office Action asserts that Lewis et al. teaches a detector operatively associated with a sensor array, but the Office Action does not provide a specific recitation as to where such a teaching exists in Lewis et al. Namely, while Lewis et al. describes a sensor array that comprises chemically sensitive resistors, with an electrical measuring device electrically connected to the sensor array, there does not appear to be a description in Lewis et al. as to the sensor array being optically connected with a detector.

Accordingly, presently pending independent claim 258 is patentable over the combined teachings of Lewis et al. and Schultz.

The presently pending dependent claims under rejection are patentable due to their dependencies on either base claim 232 or base claim 258, as well as for the specific features recited in those dependent claims. For example, dependent claim 269 recites a step of moving the second solution from near the left edge of the array in the direction of said right edge of the array. Such features are not discussed at all in the Office Action, whereby such features are believed to provide a separate basis of patentability for claim 269.

**Conclusion:**

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicants submit the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant(s) hereby petition(s) for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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